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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|-------------|----------------------|----------------------|------------------|
| 10/619,820 | 07/14/2003 | Vivian Liu | 57000-20002.00 | 8575 |
| 38706 | 7590 | 08/29/2005 | EXAMINER | |
| FOLEY & LARDNER LLP 1530 PAGE MILL ROAD PALO ALTO, CA 94304 | | | BRADICK, THOMAS DALE | |
| | | | ART UNIT | PAPER NUMBER |
| | | | 1651 | |
| DATE MAILED: 08/29/2005 | | | | |

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/619,820

Applicant(s)

LIU ET AL.

Examiner

Thomas D. Bradrick

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1651

– The MAILING DATE of this communication appears on the cover sheet with the correspondence address –
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-35 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☐ Claim(s) ____ is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☒ Claim(s) 1-35 are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

DETAILED ACTION

Election/Restrictions

Restriction to one of the following inventions is required under 35 U.S.C. 121:

- I. Claims 1-23, drawn to a label-free method for classifying cellular events, comprising measuring a value of an electrical property for a cell having a known receptor type and messenger pathway, classified in class 436, subclass 63.
- II. Claims 24-35, drawn to drawn to a label-free method for classifying cellular events, comprising measuring changes in the electrical properties of a circuit containing cells having a known receptor type and messenger pathway, classified in class 436, subclass 149.

The inventions are distinct, each from the other because of the following reasons:

The processes are distinct from one another because they recite different and distinct steps. They are also independent and distinct from one another as they have acquired a separate status in the art and require independent searches, particularly with regard to the literature. Clearly, a reference that would anticipate one of the above groups would not necessarily anticipate or even make obvious any of the others.

An undue burden would ensue from the examination of multiple methods that have distinct steps and end points. Burden lies not only in the search of US Patents, but in the search for literature and foreign patents and examination of the claim

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language and specification for compliance with the statutes concerning new matter, distinctness and scope of enablement.

Because these inventions are distinct for the reasons given above restriction for examination purposes as indicated is proper.

This application contains claims directed to the following patentably distinct species of the claimed invention: cellular events chosen from the group comprising signal transduction from ligand/receptor interactions, cytotoxicity, apoptosis, tumor cell progression and stem cell differentiation; electrical properties chosen from the group comprising impedance phase, impedance magnitude, complex reflection coefficients, total circuit resistance and total circuit capacitance; substance stimuli chosen from the group consisting of ligands, small molecule ligands, proteins, antibodies, lipids, carbohydrates, nucleic acids, water and ions; impedance changes measured as resistance, reactance, admittance, conductance and susceptance.

Applicant is required under 35 U.S.C. 121 to elect a single disclosed species for prosecution on the merits to which the claims shall be restricted if no generic claim is finally held to be allowable. Currently, groups I and II are generic.

If Group I is elected, please choose a species from claim 2 or 15, namely signal transduction from ligand/receptor interactions, cytotoxicity, apoptosis, tumor cell progression or stem cell differentiation and a species from claim 3, namely impedance phase, impedance magnitude, complex reflection coefficients, total circuit resistance or total circuit capacitance. Please note that if complex reflection coefficients, total circuit resistance or total circuit capacitance is chosen, claims 12-23 will be canceled. If

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impedance phase or impedance magnitude is chosen, please choose a species from claims 16 and 17, namely resistance, reactance, admittance, conductance or susceptance and note that claims 1-11 will be canceled. Also, please choose a species from claims 7 and 8 or 21 and 22, namely ligands, small molecule ligands, proteins, antibodies, lipids, carbohydrates, nucleic acids, water or ions and note that if small molecule ligands is chosen, claim 8 or 22 will be canceled, as appropriate. If ligands, proteins, antibodies, lipids, carbohydrates, nucleic acids, water or ions is chosen, claim 7 or 21 will be canceled, as appropriate.

If Group II is elected, please choose a species from claim 25, namely signal transduction from ligand/receptor interactions, cytotoxicity, apoptosis, tumor cell progression or stem cell differentiation; a species from claim 26, namely impedance phase, impedance magnitude, complex reflection coefficients, total circuit resistance or total circuit capacitance; and a species from claims 30 and 31, namely ligands, small molecule ligands, proteins, antibodies, lipids, carbohydrates, nucleic acids, water or ions. Please note that if small molecule ligands is chosen, claim 31 will be canceled. If ligands, proteins, antibodies, lipids, carbohydrates, nucleic acids, water or ions is chosen, claim 30 will be canceled.

Applicant is advised that a reply to this requirement must include an identification of the species that is elected consonant with this requirement, and a listing of all claims **readable thereon**, including any claims subsequently added. An argument that a claim is allowable or that all claims are generic is considered nonresponsive unless accompanied by an election.

Upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which are written in dependent form or otherwise include all the limitations of an allowed generic claim as provided by 37 CFR 1.141. If claims are added after the election, applicant must indicate which are readable upon the elected species. MPEP § 809.02(a).

Should applicant traverse on the ground that the species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. 103(a) of the other invention.

Applicant is advised that the response to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed (37 CFR 1.143).

Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a diligently-filed petition under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(h).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thomas Bradrick whose telephone number is (571) 272-

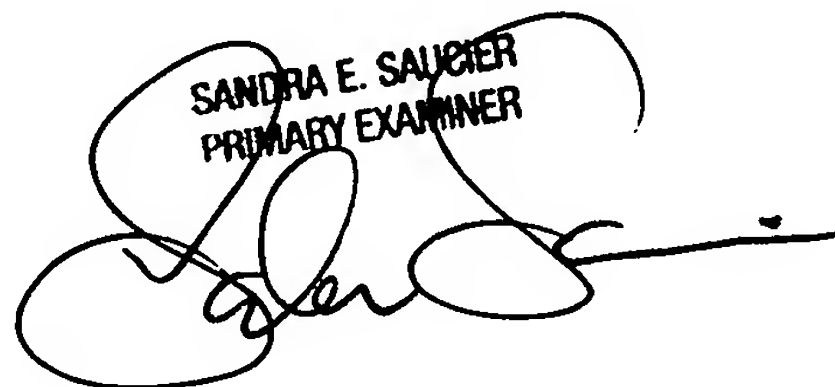
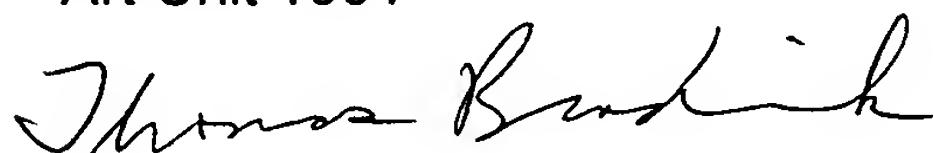
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8139. The examiner can normally be reached Monday through Friday between 8:30 a.m. and 6:30 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, M. Wityshyn can be reached on (571) 272-0926. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Thomas Bradrick
Patent Examiner
Art Unit 1651



SANDRA E. SAUCIER
PRIMARY EXAMINER